REMARKS

Claims 19 and 20 have been withdrawn from consideration. Claims 1, 9, and 22 have been amended. Support for the amendments to claims 1, 9, and 22 may be found throughout the specification. No new matter has been added. Upon entry of this Amendment, claims 1-18, and 21-24 remain pending.

In the Office Action dated August 5, 2005, claim 9 was objected to because of an informality. Claim 9 has been amended such that the informality has been removed, thereby mooting the objection. Accordingly, Applicants respectfully request that the objection to claim 9 be withdrawn.

In the Office Action, claims 1, 16-18, and 22-24 were rejected under 35 U.S.C. 102(b) as being anticipated by Klebanoff (U.S. Patent No. 6,169,652). Applicants respectfully traverse this rejection.

Independent claim 1 recites a lithographic apparatus that includes, *inter alia*, "an article handler to move said article during placement of said article on, or removal of said article from said article support, said article handler comprising an electrode and a dielectric layer in order to form an electrostatic clamp to electrostatically clamp said article." Klebanoff does not disclose or suggest all of the features of claim 1.

Klebanoff discloses an electrostatically screened, voltage-controlled electrostatic chuck for holding wafers and marks in sub-atmospheric operations. (Klebanoff at abstract.) In the Background of the Invention section, Klebanoff discusses the types of chucks that are used "to hold semiconductors wafers during processing." (Klebanoff at col. 1, lns. 20-21, emphasis added.) Klebanoff does not disclose or suggest a lithographic apparatus that includes an article handler to move an article during placement of the article on, or removal of the article from an article support, as claimed in claim 1. As recited in claim 1, it is the article handler, and not the article support that comprises the electrostatic clamp. As such, Klebanoff does not disclose or suggest all of the features of claim 1. Claims 16-18 depend from claim 1 and include additional advantageous features of Applicant's invention.

Accordingly, Applicants respectfully submit that claim 1 and the claims 16-18 are patentable over Klebanoff and respectfully request that the rejection to claims 1 and 16-18 be withdrawn.

Independent claim 22 recites a lithographic apparatus that includes, *inter alia*, an "an article handler configured to move the article during placement of the article on, and removal of the article from, the support; and an electrostatic clamp configured to clamp the article to

the article handler, the electrostatic clamp comprising an electrode and a dielectric layer." Klebanoff is discussed above and does not disclose or suggest all of the features of claim 22. As claimed, the electrostatic clamp is configured to clamp the article to the article handler, not to the support, and the article handler is configured to move the article during placement of the article on, and removal of the article from, the support. Claims 23 and 24 depend from claim 22 and include additional advantageous features of Applicants' invention.

Accordingly, Applicants respectfully submit that claims 22-24 are patentable over Klebanoff and respectfully request that the rejection to claims 22-24 be withdrawn.

In the Office Action, claims 1, 16-18, and 22-24 were rejected under 35 U.S.C. 102(b) as being anticipated by Yamada et al. (U.S. Patent No. 6,134,096). Applicants respectfully traverse this rejection.

In the Background of the Invention section, Yamada et al. discloses that electrostatic chucks are used for "attracting and holding semiconductor wafers in conveying, film-forming processes such as light exposure, CVD and sputtering, fine machining, washing, etching, dicing, etc. for the semiconductor wafers." (Yamada et al. at col. 1, lns. 11-16, emphasis added.) Yamada et al. also states "if the electrostatic chuck is used for a semiconductor-producing apparatus, the chuck is exposed to a halogen based corrosive gas as an etching gas or a cleaning gas." (Yamada et al. at col. 6, lns. 1-4.) Yamada et al. simply does not disclose or suggest a lithographic apparatus as claimed in claim 1. For example, Yamada et al. does not disclose "an illumination system to provide a beam of radiation on a flat article on an article support in a beam path of said beam of radiation" or "an article handler to move said article during placement of said article on, or removal if said article from said article support, said article handler comprising an electrode and a dielectric layer in order to form an electrostatic clamp to electrically clamp said article," as claimed in claim 1. Claims 16-18 are discussed above.

Accordingly, Applicants respectfully submit that claims 1 and 16-18 are patentable over Yamada et al. and respectfully request that the rejection to claims 1 and 16-18 be withdrawn.

Claim 22 is and Yamada et al. are discussed above. Yamada et al. clearly does not disclose or suggest all of the features of claim 22. Applicants respectfully submit that claims 22-24 are patentable over Yamada et al. and respectfully request that the rejection to claim 22 and claims 23 and 24 that depend from claim 22 be withdrawn.

In the Office Action, claims 1, 2, 6, 7, 10, 11, 14, 16-18, and 22-24 were rejected under 35 U.S.C. 102(b) as being anticipated by Kitabayashi et al. (U.S. Patent No. 5,530,616). Applicants respectfully traverse this rejection.

Claim 1 is discussed above. Kitabayashi et al. does not disclose or suggest all of the features of claim 1. Kitabayashi et al. discloses an electrostatic chuck for electrostatically clamping a semi-conductor wafer. (Kitabayashi et al. at abstract.) The Examiner concedes that Kitabayashi et al. does not specifically disclose an illumination system, but is relying on the theory of inherency to make up for this deficiency. In order to properly rely on inherency, the allegedly inherent characteristic must necessarily flow from the teachings of the applied prior art. (MPEP §2112, *citing Ex parte Levy*, 17 USPQ2d 1461,1464 (Bd. Pat. App. & Inter. 1990.) However, the Examiner's assertion that "some type of illumination system must be present for the device of Kitabayashi to function as intended" is misplaced, especially in view of the teachings of Kitabayashi et al. itself. Kitabayashi et al. discloses that "[t]he electrostatic chuck 1 is placed in a plasma processing apparatus which has a grounded opposite electrode 10 positioned above the electrostatic chuck 1...When a high-frequency voltage is applied to the conductive layer 8 by the high-frequency power source 9, active radicals 11 are produced between the semiconductor wafer W and the opposite electrode 10, etching an Si oxide film or the like in the semiconductor wafer W." (Kitabayashi et al. at col. 4, lns. 33-48.) Thus, a lithographic apparatus that includes "an illumination system to provide a beam of radiation" does not necessarily flow from the teachings of Kitabayashi et al.

Moreover, Kitabayashi et al. does not disclose or suggest a lithographic apparatus that includes "an article handler to move said article during placement of said article on, or removal of said article from said article support, said article handler comprising an electrode and a dielectric layer in order to form an electrostatic clamp to electrostatically clamp said article." Kitabayashi et al. merely discloses an electrostatic clamp with certain features.

Accordingly, Applicants respectfully submit that claim 1 and claims 2-18 that depend from claim 1 are patentable over Kitabayashi et al. and respectfully request that the rejection to claims 1, 2, 6, 7, 10, 11, 14, and 16-18 be withdrawn.

Claim 22 is also discussed above. Because Kitabayashi et al. does not disclose or suggest all of the features of claim 22, Applicants respectfully submit that claim 22 and claims 23 and 24 that depend therefrom are patentable over Kitabayashi et al. and respectfully request that the rejection to claims 22-24 be withdrawn.

In the Office Action, claims 4 and 21 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kitabayashi et al. in view of Blake et al. Applicants respectfully traverse this rejection.

As discussed above, claim 4 depends from claim 1 and is patentable over Kitabayashi et al. Blake et al. does not make up for the deficiencies of Kitabayashi et al. First, Blake et al. discloses an ion beam for implanting ions into a wafer held by a clamp assembly (Blake et al. at col. 4, lns. 51-58), and not a lithographic apparatus that includes an illumination system to provide a beam of radiation. Second, Blake et al. discloses a clamp assembly for securing a silicon wafer to a wafer support and for supporting and holding a semiconductor wafer for processing. (Blake et al. at col. 1, lns. 31-32; col. 2, lns. 32-34.) Blake et al. does not disclose or suggest "an article handler to move said article during placement of said article on, or removal if said article from said article support, said article handler comprising an electrode and a dielectric layer in order to form an electrostatic clamp to electrically clamp said article," as claimed in claim 1. Claim 4 includes additional advantageous features of Applicants' invention.

Accordingly, Applicants respectfully submit that claim 4 is patentable over Kitabayashi et al. in view of Blake et al. and respectfully request that the rejection to claim 4 be withdrawn.

Claim 21 recites a device manufacturing method that includes, *inter alia*, "providing a beam of radiation using an illumination system; using a patterning structure to impart the projection beam with a pattern in its cross-section; and projecting, after detecting the presence of said substrate, the patterned beam of radiation onto a target portion of the substrate." Kitabayashi et al. and Blake et al. are discussed above. The combination of Kitabayashi et al. in view of Blake et al. simply does not disclose or suggest all of the features of claim 21.

In the Office Action, claim 3 was rejected under 35 U.S.C. 103(a) as being unpatentable over Kitabayashi et al. Applicants respectfully traverse this rejection. Claim 3 depends from claim 2, which depends from claim 1, and includes additional advantageous features of Applicants' invention. Thus, claim 3 is patentable over Kitabayahi et al. – for at least the reasons discussed above in regard to claim 1. Accordingly, Applicants respectfully request that the rejection to claim 3 be withdrawn.

In the Office Action, claims 8, 9, and 12-15 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kitabayashi et al. in view of Divakar (U.S. Patent No. 6,606,234). Applicants respectfully traverse this rejection.

Claims 8, 9, and 12-15 all depend from claim 1. As discussed above, claim 1 is patentable over Kitabayashi et al. Divakar does not make up for the deficiencies of Kitabayashi et al.

Divakar discloses an electrostatic chuck that may be used during wafer manufacturing plasma applications such as deposition or etching. (Divakar at col. 1, lns. 8-10.) Divakar does not disclose or suggest that the chuck may be used in a lithographic apparatus that includes an illumination system, nor does Divakar disclose or suggest an article handler, as claimed by claim 1. Claims 8, 9, and 12-15 depend from claim 1 and include additional advantageous features of Applicants' invention.

Accordingly, Applicants respectfully submit that claims 8, 9, and 12-15 are patentable over Kitabayashi et al. in view of Divakar, and respectfully request that the rejection to claims 8, 9, and 12-15 be withdrawn.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited. If any point remains at issue which the Examiner feels may best be resolved through a personal or telephone interview, please contact the undersigned at the telephone number below.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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